

## **NOTICE OF ALLOWANCE**

### ***Status of the claims***

This action is in response to papers filed June 19, 2009.

The previous rejections in the office action dated January 22, 2009 are withdrawn. Claims 28, 33 and 40 have been allowed. Claims 1-27, 29-32 and 34-39 have been cancelled in view of a telephone interview with Mr. Meyers on July 14, 2009 and subsequent confirmation by Fax on July 15, 2009.

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Meyers on July 14, 2009 and further confirmed by subsequent fax message sent to Examiner by Mr. Meyers on July 15, 2009.

The application has been amended as follows:

In the claims:

Claims 28, 33 and 40 have been rewritten as follows:

28. A Single Strand DNA Conformation Polymorphism (SSCP) method for obtaining the editing profile of 5-HT2c-r mRNA, using a specific tissue sample or using a sample of a population of eukaryotic cells, characterized in that the method comprises:

- a) extraction of the total RNA of said sample, followed, where appropriate, by purification of the mRNA;
- b) reverse transcription of the RNA extracted in step a) and synthesis of the double-stranded DNA;
- c) PCR amplification of the DNA obtained in step b) using the following pair of primers specific for 5-HT2c-r mRNA, wherein said mRNA may be edited;  
PCR9 TGTCCCTAGCCATTGCTGATATGCT (SEQ ID No. 36); and PCR 10  
GCAATCTTCATGATGGCCTTAGTCCG (SEQ ID No. 37);
- d) where appropriate, purification of the PCR products obtained in step c);
- e) where appropriate, quantification of the PCR products obtained in step d);
- f) dissociation of the double-stranded DNA to single-stranded DNA, in particular by heating followed by abrupt cooling;
- g) separation of the single-stranded DNA by capillary electrophoresis;
- h) obtaining of the editing profile by reading fluorescence and, where appropriate, acquisition of profile data by means of an exploitation system associated with a fluorescence reader and
- i) showing at least 13 characteristics profile of the edited or unedited forms of the 5-HT2c-r mRNA.

33. An SSCP method for obtaining the editing profile and the editing rate of an mRNA, wherein said mRNA may be edited, using a specific tissue sample or using a sample of a population of eukaryotic cells, characterized in that the method comprises:

- a) obtaining an editing profile of 5-HT2c-r mRNA by the SSCP method as claimed in one of claims 28 or 40;
- b) comparing the profile obtained in step a) with standard profiles corresponding to:
- characteristic profiles obtained, for each of the edited (or unedited) separate forms of said mRNA; and/or
  - characteristic profiles of known qualitative and/or quantitative mixtures of each of these edited or unedited forms, and/or
  - known editing profiles, of this same mRNA for normal patients or patients presenting confirmed pathologies, for mRNA extracts of said specific tissues, or else for said population of eukaryotic cells;
- c) selecting the known editing profile corresponding to the editing profile obtained in step a); and
- d) associating the editing rate of the profile selected in step c) with the editing profile obtained in step a).
40. The SSCP method as claimed in claim 28, characterized in that the pair of primers is labeled with fluorophores.

#### ***REASONS FOR ALLOWANCE***

The following is an examiner's statement of reasons for allowance:

Art of the record discussed: Stanton et al, Larsen et al and Gelfand et al.

Stanton et al teaches a SSCP method for obtaining the editing profile of 5-HT2cR mRNA using a specific tissue sample or using a sample of a population of eukaryotic

cells. Larsen et al teaches a high-throughput SSCP analysis by automated capillary electrophoresis and generating PCR amplified double-stranded DNA using fluorescently labeled primer, separation of single stranded DNA by capillary electrophoresis, and obtaining the electrophoretic profile by reading the fluorescence and acquisition by means of a genetic analyzer detection system associated with fluorescence reader. Gelfand et al is used for providing guidance for selecting primers. However, neither of these documents, taken alone or in combination, suggests a CE- SSCP method associated with a fluorescent reader in order to separate and quantify the total editing profile of the 5-HT<sub>2c</sub>R mRNA using the pair of primers consisting of SEQ ID NO:36 and SEQ ID NO: 37, as defined in Applicant's claims. Also Applicants have made convincing arguments that the SEQ ID NO 36 and 37 provide unexpected results of detecting more different forms of edited or unedited forms of the 5-HT<sub>c</sub>-r-mRNA than the prior art of the record (Remarks, filed June 24, 2009 and Poyau et al).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Claims 28, 33 and 40 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Narayan K. Bhat whose telephone number is (571)-272-5540. The examiner can normally be reached on 8.30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James (Douglas) Schultz can be reached on (571)-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Narayan K. Bhat

Examiner, Art Unit 1634

/JD Schultz/

Supervisory Patent Examiner, Art Unit 1635